

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

1. - 3. (Canceled)

4. (Currently amended) An outgas[[sing]] collection method comprising the steps of:

holding, within an exposure chamber under vacuum, a substrate on which surface a resist film is formed;

irradiating said resist film with an electron beam; and

collecting an outgas[[sing]] released from said resist film when irradiated with said electron beam to prevent the outgas from absorbing the energy of the electron beam.

5. (Currently amended) An outgas[[sing]] analysis method comprising the steps of:

holding, within an exposure chamber under vacuum, a substrate on which surface a resist film is formed;

irradiating said resist film with an electron beam;

collecting an outgas[[sing]] released from said resist film when irradiated with said electron beam to prevent the outgas from absorbing the energy of the electron beam; and

analyzing a constituent of said collected outgas[[sing]].

6. (Currently amended) An outgas[[sing]] analysis method comprising the steps of:

holding, within an exposure chamber under vacuum, a substrate on which surface a resist film is formed;

irradiating said resist film with an electron beam; and

analyzing a constituent of an outgas[[sing]] released from said resist film when irradiated with said electron beam.

7. (Canceled)

8. (New) An electron beam exposure apparatus comprising:  
a substrate holder provided within an exposure chamber under vacuum, and for holding a substrate on which surface a resist film is formed; and  
electron beam irradiation means for irradiating said resist film with an electron beam,  
wherein the exposure chamber is constructed such that an outgas, released from said resist film during irradiation with said electron beam, is collected in order to prevent the outgas from absorbing the energy of the electron beam.

9. (New) The electron beam exposure apparatus of Claim 8, further comprising a gas analysis means for analyzing a constituent of said collected outgas.

10. (New) An electron beam exposure apparatus comprising:  
a substrate holder provided within an exposure chamber under vacuum, and for holding a substrate on which surface a resist film is formed; and  
electron beam irradiation means for irradiating said resist film with an electron beam,  
wherein the exposure chamber is constructed such that an outgas, released from said resist film when irradiated with said electron beam, is collected in order to prevent the outgas from absorbing the energy of the electron beam and to analyze the constituents of the collected outgas.